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[54] UPRIGHT VACUUM CLEANER WITH CYCLONIC AIRFLOW

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[*] Notice: This patent is subject to a terminal disclaimer.

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Related U.S. Application Data

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[52] U.S. Cl. 15/347; 15/353

[58] Field of Search ..... 15/353, 352, 347; 55/337, 523, 528, 379, DIG. 2, DIG. 3

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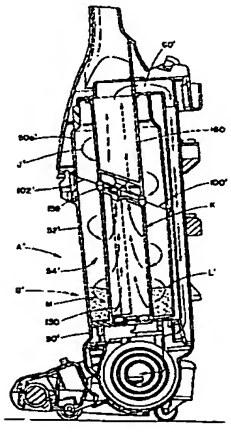
[57] ABSTRACT

An upright vacuum cleaner (A) includes an upright housing section (B) and a nozzle section (C). A cyclonic airflow dirt and dust separating chamber (54) is defined in said upright housing section. A suction source (E) pulls air and entrained dirt, dust, and other contaminants through a main suction opening (26) formed in the underside (24) of the nozzle and into the cyclonic airflow chamber (54). The cyclonic airflow chamber causes the suction airstream to travel in a cyclonic path such that the entrained contaminants are separated therefrom and deposited into a dirt container (52) that defines the lower portion of the chamber (54). A main filter element (H) filters residual contaminants from the suction airstream between the chamber and the suction source. The main filter element is preferably made from high-density polyethylene porous filter media. A final filter assembly (F) filters the suction airstream discharged by the suction source to ensure that the air discharged into the atmosphere is contaminant free, including those contaminants introduced into the airstream by the suction source itself.

22 Claims, 20 Drawing Sheets



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